# Getting there on foot, by cycle

A strategy to advance walking and cycling in New Zealand transport

February 2005



### FOREWORD

In 2002, the Government released the *New Zealand Transport Strategy*, the first national transport strategy to seek to integrate all modes and users of transport. Its vision:

"By 2010 New Zealand will have an affordable, integrated, safe, responsive, and sustainable transport system."

Achieving this vision requires getting the most from all modes of transport — including walking and cycling.

In New Zealand, we undertake more than a billion trips a year on foot, and at least a hundred million by cycle. That's a lot of trips. But the truth is, we don't walk and cycle as much as we used to in our day-to-day lives.

Getting there — on foot, by cycle sets out a strategy to advance walking and cycling in New Zealand transport. It aims to ensure that we have supportive walking and cycling environments in New Zealand communities, that safety is improved for pedestrians and cyclists, and that people walk and cycle more as part of their day-to-day transport mix.

The benefits of this will be great. We will be a fitter nation. We will be helping to make our air cleaner and our streets less congested. Creating communities that are safer and more walk-and-cycle-friendly will help to ensure a land transport system that works for everyone.

The Labour Progressive Government would like to acknowledge the valuable contribution of the Green Party during the development of *Getting there* — *on foot, by cycle*. I would also like to recognise the work of the Hon Paul Swain — the previous Minister of Transport, who directed the development of the draft Strategy that was released for consultation in 2003 — and to thank the many individuals and organisations who commented on that draft. It was heartening that most of you thought we were on the right track.

As the examples used throughout *Getting there* — *on foot, by cycle* show, work is already underway for walking and cycling in New Zealand, providing a strong platform on which *Getting there* — *on foot, by cycle* can build. However, more action is required.

Central government will take a leading role in the Strategy, and central government agencies will work toward its implementation. However, *Getting there — on foot, by cycle* also recognises that much of the necessary action for walking and cycling will continue to happen regionally and locally. Given this, supporting and strengthening effective local action will be an early priority for Strategy implementation.

We look forward to working together with you to achieve our vision of a New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment.

Hon Pete Hodgson Minister of Transport

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## **GETTING THERE — ON FOOT, BY CYCLE**

### A strategy to advance walking and cycling in New Zealand transport

### OUR VISION

A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment

### SUPPORTED BY THREE GOALS

Community environments and transport systems that support walking and cycling
 More people choosing to walk and cycle, more often
 Improved safety for pedestrians and cyclists

### **REQUIRING ACTION ON 10 PRIORITIES, ACROSS FOUR FOCUS AREAS**

### FOCUS ONE

### Strengthening foundations for effective action

### Priorities for action

- 1. Encourage action for walking and cycling within an integrated, sustainable approach to land transport
- 2. Expand our knowledge and skill base to address walking and cycling
- 3. Encourage collaboration and co-ordination of efforts for walking and cycling

### FOCUS TWO Providing supportive

environments and systems

#### Priorities for action

- 4. Encourage land use, planning and design that supports walking and cycling
- 5. Provide supportive enviroments for walking and cycling in existing communities
- 6. Improve networks for long-distance cycling

### FOCUS THREE Influencing individual travel choices

#### Priorities for action

- Encourage positive attitudes towards and perceptions of walking and cycling as modes of transport
- 8. Encourage and support individuals in changing their travel choices

### FOCUS FOUR Improving safety and security

Priorities for action

- 9. Improve road safety for pedestrians and cyclists
- 10. Address crime and personal security concerns around walking and cycling

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### **INFORMED BY SIX KEY PRINCIPLES**

Walking and cycling face similar issues, but are different modes of transport with different needs
Providing a transport system that works for pedestrians and cyclists means catering for diversity

- Walking and cycling are important for all communities, but critical in urban areas
  - Increasing the use of walking and cycling requires a comprehensive approach

Safety needs to be integrated with promotion

• The needs of current users must be addressed alongside those of new users

### UNDERPINNED BY A NATIONAL FRAMEWORK FOR IMPLEMENTATION

Central co-ordination process, supported by national advisory groups
 Annual implementation plans for national agencies

• Performance indicators, plus regular monitoring and evaluation

Informed government investment

• Early emphasis on supporting effective local action

### CHAPTER 1. INTRODUCTION

When the Government developed the *New Zealand Transport Strategy* in 2002, it made a commitment to developing a national strategy for walking and cycling. This commitment recognises the importance of these modes of transport within the New Zealand transport mix, and their potential to contribute to the Government's economic, social and environmental objectives.

Transport walking and cycling is the use of walking and cycling to provide day-to-day mobility, enabling individuals to access communities, services, desired destinations and opportunities. This can include walking and cycling for a wide range of purposes — from getting to work or school, to shopping or visiting the local doctor; from visiting friends or family, to walking the dog or going for a recreational cycle around the neighbourhood.

At a time when the benefits of walking and cycling for transport are increasingly being recognised, there is also a growing recognition that further action is required for these benefits to be fully realised.

Worldwide, as travel patterns, transport policies and urban planning have become more oriented toward motor vehicles, the use of walking and cycling for transport has declined. New Zealand is no exception (see box insert). This orientation towards motor vehicles has also resulted in inequities between the provision for walking and cycling and that for motor vehicles.

The development of *Getting there* — *on foot, by cycle* recognises that a range of efforts to encourage walking and cycling are already underway nationally, regionally and locally. Examples of such action are included throughout this document.

It also recognises that more concerted and collective action is required to ensure that walking and cycling can flourish as modes of transport and that our transport systems support and encourage their use. An improved transport system for pedestrians and cyclists is also expected to benefit those who walk and cycle for leisure (see box insert next page).

### Declines in walking and cycling in New Zealand household travel

- It is estimated that in 1998, New Zealanders undertook approximately 400,000 fewer journeys solely on foot per day than in 1990 (New Zealand Pedestrian Profile, 2000).
- Between 1990 and 1998, the number of cycling trips in New Zealand reduced by 39%.
- The decline in both walking and cycling as forms of household travel is most apparent among the young.

Based on comparison of New Zealand Travel Survey data for 1997/98 and 1989/90

Getting there — on foot, by cycle articulates the Government's vision of a New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment, helping to ensure a healthier population, more lively and connected communities, and a more affordable, integrated, safe, responsive, and sustainable transport system.

*Getting there* — *on foot, by cycle* will be used to:

- · support effective, integrated and co-ordinated action for walking and cycling
- help to inform future decision making by central government and guide the work of its agencies
- guide the development of the implementation plans that will give effect to the strategy at a national level
- act as an important point of reference for those working regionally and locally, both as they work to develop integrated, multi-modal transport systems, and as they plan and under take action specifically for walking and cycling.

## *Getting there* — *on foot, by cycle:* Focused on transport, but supporting walking and cycling for leisure

*Getting there* — *on foot, by cycle* recognises that our transport system is often used to access or partake in leisure activities. In fact, around 30% of all household travel is undertaken for social or leisure purposes (*New Zealand Travel Survey,* Land Transport Safety Authority, 2000).

Walking is the most common active leisure activity among New Zealand adults, while on-road cycling features in the active leisure of one in five young people (*SPARC Facts, Results of the New Zealand Sport and Physical Activity Surveys, 1997–2001*).

Because the road environment is a common setting for leisure-oriented walking and cycling, improving the on-road environment for pedestrians and cyclists is expected to benefit those who walk and cycle for leisure. *Getting there — on foot, by cycle* also recognises that off-road facilities for walking and cycling that serve transport as well as leisure functions can make an important contribution to a multi-modal transport system.

# The New Zealand Transport Strategy: The policy context for Getting there — on foot, by cycle

The policy framework for *Getting there* — *on foot, by cycle* is provided by the *New Zealand Transport Strategy (NZTS)*. The *NZTS* has been developed to guide central government and its various agencies when making decisions about transport.

The NZTS has the following vision:

By 2010, New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system.

This vision will be achieved by developing a transport system that contributes towards five key objectives. These are:

- · improving access and mobility
- protecting and promoting public health
- · ensuring environmental sustainability
- · assisting economic development
- · assisting safety and personal security.

Underpinning the *NZTS* is the premise that these objectives must all be progressed in parallel in order to achieve sustainable transport.

The *NZTS* recognises that different modes of transport can contribute to transport in different ways. It seeks to achieve a more sustainable transport system by recognising the benefits of all modes, considering and balancing the impacts that different modes may have on others, and ensuring that any trade-offs are consciously made.

*Getting there* — *on foot, by cycle* maximises the contribution of walking and cycling to achieving the *NZTS* vision and objectives.

### Contributions of walking and cycling to transport goals and objectives

The development of walking and cycling is integral to achieving the five key objectives of the *NZTS*.

### Improving access and mobility

Walking and cycling provide access, mobility and transport choice to a wide range of New Zealanders. Walking and cycling together account for one in five household travel trips.

### Walking is our second most common travel mode

Over a billion trips (nearly 19% of household travel trips) are made on foot. Walking is second only to private motor vehicle use in terms of its significance within our household travel. On average, Pacific peoples spend the most time as pedestrians, followed by Maori, then European New Zealanders.

### Cycling numbers are similar to those for public transport

Cycling accounts for more than a hundred million trips annually — nearly 2% of household travel trips — a proportion similar to the proportion of trips undertaken using public transport (2.5%). On average, European New Zealanders spend the most time as cyclists, followed by Pacific peoples, then Maori.

# Walking and cycling are important modes of transport for those with fewer transport options

Walking and cycling are particularly important modes of transport for New Zealand households that do not own a motor vehicle and for those within car-owning households for whom vehicle access is limited (see box insert). For example:

- walking and cycling are the only modes of transport that can provide children and many young people free or cheap and independent access to their communities
- in smaller centres with little or no public transport, walking and cycling may provide the only alternatives to car use
- pedestrian networks provide important access to their local communities for many people with disabilities or limited mobility
- 27% of trips undertaken by those over the age of 80 are on foot.

### Walking and cycling support other modes of transport Walking and cycling can also support the use of other modes of transport. When we step out of our cars, very often we become pedestrians. The walks to and from the transit stop are essential components of most public transport journeys, and cycling can extend the catchment area of public transport.

### Not all New Zealanders have independent access to motor vehicles

It is easy to think of New Zealanders as having universal access to motor vehicles, but many do not.

Around 10% of New Zealand households do not own a motor vehicle.

Over 20% of New Zealanders are under the legal driving age of 15 (2001 Census, Statistics New Zealand).

Not everyone of driving age drives. Among European New Zealanders, 92% of males and 85% of females currently drive. Among Maori, this falls to 84% of males and 64% of females. Among Pacific Island peoples, only 72% of males and 53% of females are current drivers

(New Zealand Travel Survey, LTSA, 2000).

Walking and cycling contribute to connected and liveable communities Transport connects people to their communities. People engage with their communities more intimately when travelling on foot and by cycle than when travelling in a motor vehicle. Because of this, walking and cycling can play important roles in the development of lively, well connected, and friendly communities. Streets designed for people — not just cars — are considered important indicators of a community's 'liveability'.

### Protecting and promoting public health

As a nation, we are becoming less physically active (see box insert). While walking and cycling remain popular leisure pursuits, our increasing use of cars for the short day-to-day transport trips that we used to make on foot or by bicycle is damaging our health.

By promoting walking and cycling as transport and by ensuring that our transport systems support walking and cycling for both transport and enjoyment, *Getting there* — *on foot, by cycle* will support other Government strategies for health and active living and make an important contribution to building a healthier population.

#### **Ensuring environmental sustainability**

Walking and cycling are among the most environmentally friendly forms of transport. Unlike motor vehicles, they are non-polluting and use no fossil fuels.

Journeys made on foot or by cycle can free up road and parking space, helping to slow the need for further expensive investment in transport infrastructure for motor vehicles.

Currently, a significant proportion of our motor vehicle trips are over relatively short distances (for example, under two or three kilometres). Often these short trips involve 'cold starts', making them

#### Activity levels and health

Regular physical activity can reduce the risk of a host of health-related conditions, including heart disease, strokes, type-2 diabetes, obesity, some cancers, depression and osteoporosis.

The current Adult New Zealand Guidelines for Physical Activity recommend 30 minutes per day of moderate-intensity physical activity on five or more days of the week. (*Movement* = *Health*, Hillary Commission, 2001).

Currently, over a third of New Zealanders are insufficiently active to benefit their health (Sport and Recreation New Zealand, 2002). Some health conditions, such as diabetes and obesity, are emerging as health issues for much younger age groups than were affected in the past.

Overall, physical inactivity is estimated to contribute to the deaths of 2600 New Zealanders each year (9% of all deaths). A 10% increase in the number of adults who are physically active would prevent around 600 premature deaths each year. (Tobias & Roberts, 2001).

among the least environmentally efficient of motor vehicle trips. Encouraging a shift to emission-free modes of transport like walking or cycling for such trips will contribute to New Zealand meeting its climate change commitments under the Kyoto protocol.

### Assisting economic development

Pedestrians and cyclists can provide benefits to local economies. People who walk and cycle often are more likely to 'shop local'. In town centres, pleasant walking environments can attract customers, helping provide the 'foot traffic' that is the lifeblood of many small businesses.

Tourism can also benefit from walking and cycling. Pleasant walking environments encourage tourists to stay longer and spend more. Cycle tourists tend to stay longer than those using other modes of transport, thus supporting local economies—often in regional New Zealand.

### Assisting safety and personal security

From a road safety perspective, the safety of pedestrians and cyclists is a useful indicator of the overall safety of our urban roads. Not only will improved walking and cycling environments reduce road fatalities among pedestrians and cyclists, but road environments that are safer for pedestrians and cyclists also benefit public transport users and tend to be safer for motor vehicle use. In the longer term, it is possible that reduced motor vehicle traffic, resulting from shifts to walking, cycling, and public transport, may also help improve safety on our roads.

Community safety can also benefit from walking and cycling. Streets are safer with people in them. Walking and cycling help provide the 'eyes on the street' that help keep our neighbourhoods safe from crime.

### Contributions of walking and cycling to other Government strategies

In addition to contributing to the key objectives of the *NZTS*, implementing *Getting there* — *on foot, by cycle* will also contribute to a variety of other Government strategies and policies including:

- New Zealand Health Strategy
- Sustainable Development for New Zealand Programme of Action
- New Zealand Energy Efficiency and Conservation Strategy
- New Zealand Climate Change Programme
- Vehicle Emissions Policy
- New Zealand Tourism Strategy
- Healthy Eating Healthy Action
- Positive Ageing Strategy
- Road Safety to 2010
- New Zealand Disability Strategy
- New Zealand Injury Prevention Strategy
- Opportunity for all New Zealanders
- United Nations Convention on the Rights of the Child.

### Note on walking and cycling statistics used in this document

Unless otherwise stated, statistical information on cycling and walking contained in this strategy is based on a detailed survey of household travel undertaken in 1997 and 1998 for the *New Zealand Travel Survey* (Land Transport Safety Authority, 2000).

In household travel data, every 'leg' of a journey is referred to as a 'trip'. For example, a walk to the transit stop and a bus ride, followed by a walk at the other end to a destination would count as two walking trips and a public transport trip. Similarly, a motor vehicle journey to work, with a stop on the way at a dairy, would count as two motor vehicle 'trips' to two separate destinations.

By focusing on 'trips' we can better see the multi-modal nature of many of our journeys, enabling us to plan better for all the modes of transport we use.

Note also that trips for each person are also counted separately. For example, a car carrying three people to the same destination would be counted as three motor vehicle trips — one for each car occupant.

### CHAPTER 2. VISION, GOALS AND KEY PRINCIPLES

### Our vision for walking and cycling

Our vision for walking and cycling is simple:

A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment.

Achieving this vision will, in turn, help to ensure a healthier population, more lively and connected communities, and a more affordable, integrated, safe, responsive, and sustainable transport system.

### Strategy goals

To support the achievement of our vision, three important goals have been identified for *Getting there — on foot, by cycle:* 

- · Community environments and transport systems that support walking and cycling
- More people choosing to walk and cycle, more often
- Improved safety for pedestrians and cyclists.

### **Key principles**

Six key principles inform Getting there — on foot, by cycle.

 Walking and cycling face similar issues, but they are different modes of transport Getting there — on foot, by cycle addresses both walking and cycling. However, it recognises that while many of the benefits and issues associated with these modes of transport are similar, they are still different modes of transport. Each has its particular strengths and limitations, and their use by New Zealanders in day-to-day transport differs.

For example, walking has a large user base. Although we may not think of ourselves as pedestrians, most of us generally walk as part of our daily lives. The potential for walking is likely to be greatest for relatively short — under-two-kilometre — trips. Cycling has a smaller user base. As it requires special equipment, it also requires a more conscious transport choice. However, cycling is quicker than walking and may have greater potential for use in medium-distance trips.

While some measures can benefit both walking and cycling — for example, both modes of transport can benefit from environments that result in slower motor vehicle speeds — most of the 'on the ground' facilities required by walking and cycling are different. Care needs to be taken when designing transport environments to ensure that these differences are understood and considered and that the specific needs of each mode of transport are catered for appropriately. Where conflicts might arise, emphasis needs to be placed on finding solutions that work for both modes of transport.

## 2. Providing a transport system that works for pedestrians and cyclists means catering for diversity

Not only are the needs of pedestrians and cyclists as road users different, not all pedestrians and cyclists are the same.

Cyclists can range from children new to the road environment, to urban commuters; from athletes training for elite events, to cycle tourists. Users of pedestrian facilities can be even more diverse — young people on skateboards, older people on mobility scooters, mums pushing prams, joggers, window shoppers, children travelling to school and commuters catching a bus.

Because of this diversity, designing pedestrian and cycling networks and facilities requires giving careful thought to the needs of a wide variety of users.

For pedestrian facilities in particular, those with special needs or limited mobility need to be considered.

## 3. Walking and cycling are important for all communities, but critical in urban areas

All New Zealand communities — large and small, urban and rural — can benefit from enabling and promoting walking and cycling.

Because the majority of New Zealanders live in towns and cities, and given that the majority of shorter trips are likely to occur in built up areas, urban communities are likely to provide the most significant opportunities to increase the use of walking and cycling.

Our largest cities require particular focus. Their busy road environments can present significant challenges for walking and cycling, but at the same time, these centres provide the greatest opportunities for walking and cycling to contribute toward reduced traffic congestion and vehicle emissions.

4. Increasing the use of walking and cycling for transport requires a comprehensive approach Getting more New Zealanders walking and cycling more often will require more than simply 'selling the benefits' of these modes of transport. To choose walking and cycling for day-to-day transport, individuals will need to perceive that:

#### - there are desired destinations within walking and cycling distance

 the benefits of choosing walking or cycling for a given trip are greater than the benefits of choosing another mode of transport.

## Common distances for walking and cycling trips

#### Walking

Around 70% of walking trips are under one kilometre in length.\*

Generally, journeys undertaken solely on foot tend to be longer than walking trips undertaken as part of a larger journey (for example, as part of a public transport journey).

\* Walking trip distances were estimated from reported walking trip times in the New Zealand Travel Survey, using an average walking speed of 12 minutes per kilometre.

#### Cycling

Approximately 75% of cycle trips are for distances under three kilometres.

Cyclists aged 20–39 are most likely to make longer trips.

Individuals are more likely to choose to walk or cycle if they perceive the environment as being walk-and-cycle-friendly — that is, convenient, safe, and pleasant, with direct routes that minimise travel time.

A comprehensive approach that works to maximise the range of destinations within walking or cycling distance, to improve the environment for walking and cycling, and to show individuals how these modes can effectively meet their personal needs will have the best chance of success.

#### 5. Safety needs to be integrated with promotion

The very characteristics of walking and cycling that make them desirable as modes of transport — such as their flexibility and their accessibility to a wide range of people and age groups — can also have safety implications when combined with the physical vulnerability of pedestrians and cyclists in crashes with motor vehicles.

Promoting walking and cycling without also addressing safety could result in greater risk for those who choose to use these modes of transport — and will limit their uptake. Safety must be considered and built into efforts to promote the modes.

At the same time, those designing and considering placement of facilities need to think about how to provide more *convenient* access to the road environment, not just safer access.

Overseas experience suggests that increased walking and cycling may, in turn, help achieve greater safety for pedestrians and cyclists, as motorists become more used to 'sharing the road' with these road users.

6. The needs of current users must be addressed alongside those of new users While a key goal of *Getting there* — *on foot, by cycle* is to encourage more people to choose to walk and cycle, many people already use these modes of transport. For some, this is a matter of choice; for others, a matter of necessity.

Improving access and safety for current users — especially those with fewer transport options or who live in communities where the risk of cyclist or pedestrian injury may already be high — will not only encourage current users to continue to walk and cycle, but will also ensure that gains for pedestrians and cyclists are achieved equitably.



### CHAPTER 3. PRIORITIES FOR ACTION

Work in four interrelated areas will be required to achieve the goals and vision set out in this Strategy. For each of these focus areas, priorities for action have been identified — a total of ten in all.

For ease of identification, each priority has been assigned a number, but these do not reflect importance or provide an order for implementation. Rather, each priority represents an important 'piece of the puzzle', and work will be required across the priorities. At a national level, regular implementation plans will be used to identify and prioritise specific actions that will be taken to achieve progress against *each* priority and *across* the four focus areas.

### FOCUS ONE. Strengthening foundations for effective action

Priorities for action

- 1. Encourage action for walking and cycling within an integrated, sustainable approach to land transport
- 2. Expand our knowledge and skill base to address walking and cycling
- 3. Encourage collaboration and co-ordination of efforts for walking and cycling

Early work in this area will support and inform work across all strategy areas.

### FOCUS TWO. Providing supportive environments and systems

Priorities for action

- 4. Encourage land use, planning and design that supports walking and cycling
- 5. Provide supportive environments for walking and cycling in existing communities
- 6. Improve networks for long-distance cycling

### FOCUS THREE. Influencing individual travel choices

Priorities for action

- Encourage positive attitudes towards and perceptions of walking and cycling as modes of transport
- 8. Encourage and support individuals in changing their travel choices

### FOCUS FOUR. Improving safety and security

Priorities for action

- 9. Improve road safety for pedestrians and cyclists
- 10. Address crime and personal security concerns around walking and cycling.

### FOCUS ONE

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### Strengthening foundations for effective action

Achieving significant increases in walking and cycling will require effective integration of these modes into our transport thinking, planning and management, within a sustainable transport framework. It will require a knowledgeable and capable workforce and effective tools such as good research, standards and guidelines to make the job of that workforce easier. As no one organisation or sector has the mandate, skills and resources to do all that is required, a collaborative and co-ordinated approach will increase the likelihood of success.

# Priority 1. Encourage action for walking and cycling within an integrated, sustainable approach to land transport

### Why?

Achieving the vision and objectives of the *New Zealand Transport Strategy* requires a transport system in which each mode of transport is carrying out the task for which it is best suited.

This requires all modes of transport to be fully integrated into transport planning and decision making.

For example, all road users share the same road network, whether it is accessed on foot, by private motor vehicle, by bus, or by cycle. Ensuring that the network works efficiently for all modes of transport and all users cyclists and pedestrians as well as motor vehicle users presents a significant challenge for those who plan, design, manage, maintain and fund the transport system.

As modes of day-to-day transport, walking and cycling are likely to make a significant contribution in the area of shorter-distance travel, in and around local communities. Such travel accounts for a significant proportion of our household travel.

### Walking and cycling — supporting and supported by transport demand management

Transport demand management (TDM) seeks to modify travel decisions so that more desirable transport, social, economic and environmental objectives can be achieved, and the adverse impacts of travel can be reduced. Examples of TDM tools include multi-modal network optimisation, road pricing, parking restrictions and travel behaviour change activities.

Ensuring that walking and cycling are viable, desirable transport options can support TDM activities and objectives.

At the same time, TDM activities undertaken within a broader sustainable transport framework can play an important role in increasing the desirability of walking and cycling in relation to car use.

The ability of walking and cycling to contribute to the *NZTS* will be enhanced by transport planning and management that treats all modes of transport with the same degree of care, and addresses shorter-distance travel as strategically as it does longer-distance travel. The development of integrated local transport strategies and plans can provide an important context for the development of walking and cycling strategies.

Walking and cycling also stand to benefit from a range of broader central and local government work programmes in areas such as vehicle emission reduction, sustainable settlements and transport demand management (see box insert).

### **Desired outcome**

Walking and cycling are effectively integrated into transport planning, strategies and policies, reflecting a commitment to providing a transport system that works for all modes of transport, and for local, as well as longer-distance, travel.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Transport policy and practice is based on the premise that the road corridor is shared by all travel modes, and that well designed and well managed transport systems should accommodate all users.
- The needs of pedestrians and cyclists are considered appropriately in general road improvement projects, and project design reflects best practice standards and guidelines for cyclists and pedestrians.
- The needs of cyclists and pedestrians, and the potential impacts on these groups, are fully considered as transport policies, standards, laws and rules are developed and reviewed.
- Regional land transport strategies seek to integrate walking and cycling into regional planning and address strategic issues related to local as well as longer-distance travel.
- Integrated local transport plans provide a context for the development of local walking and cycling strategies, and walking and cycling strategies emphasise integration of these modes of transport into mainstream transport planning, policies and practices.
- Transport investment policies and practices support an integrated approach to land transport, and delivery of effective regional and local walking and cycling strategies.
- Funding evaluation frameworks for road improvement projects recognise the full range of benefits related to walking and cycling.
- Transport demand management policies support an increase in the desirability of walking, cycling and public transport in relation to private motor vehicle use.
- Planning for public transport recognises the multi-modal nature of most public transport journeys, particularly the key role of walking and the benefits of increased integration of cycling into public transport journeys.

# 'Living Streets' redesign of a busy Christchurch road benefits walking and cycling

Christchurch City Council is committed to applying a 'Living Streets' approach to all its street planning, aiming for 'better quality of life and greater range of community and street activity'. This is good news for Christchurch pedestrians and cyclists.

Cryeke Road is a particularly interesting example of a 'Living Streets' project because:

- it is a relatively main road (designated an 'arterial road'), which implies precedence for through traffic — yet even in this situation, the level of service for walkers and cyclists was increased as well as that for motorists
- the project introduced the 'Living Streets' concept as part of routine engineering in this case, scheduled kerb and channel replacement — rather than as a discrete retrofit project; this saved costs and enabled a better, more integrated result.

Creyke Road carries around 15 000 motor vehicles and 600 cyclists per day, and has 1 200 pedestrian crossing movements on the curving, one kilometre section included in the project. This section is bordered by Canterbury University, 100 homes, a school, a research facility, a motel and a petrol station.



The redesign aimed to reduce traffic speeds without reducing traffic volumes or travel times, and to improve accessibility for other modes of transport, notably walking and cycling. This involved working with the entire 20 metre road reserve. Measures included:

- narrowing the road carriageway, enabling (typically) a 3.2 metre traffic lane, a new 1.8 metre cycle lane and up to a 5 metre berm on each side of the centre line
- footpath widening near the university, where the highest pedestrian numbers were expected; some public art was also included in the project but was placed so as not to interfere with pedestrian flow
- turning lanes at intersections and opposite these islands; the turning lanes increase motorists' level of service, especially during peak times, by preventing turning vehicles from hindering the main road flow; the islands help make it easier for pedestrians to cross the road
- removal of two-thirds of on-street parking residents, with ample on-site parking, supported this; there was opposition from students, but the 70 spaces lost are in a context of some 3 000 overall campus car parks
- provision of bus bays and parking bays at selected locations
- significant tree planting along the berms and in the (three) islands berm trees make the road appear narrower, and road curves and island trees keep vistas short, encouraging slower, safer traffic speeds.

The project involved extensive consultation with residents and other stakeholders. A collaborative approach generated a wealth of ideas from which technical staff could formulate the project design, checking back with stakeholders in an iterative process.

Monitoring before the project showed average traffic speeds of 49 kilometres per hour (85th percentile, 55 kilometres per hour). This will be compared with post-project monitoring.

Another case of cycling improvements being worked into a routine arterial road engineering project was on Hamilton's Te Rapa Road, a major artery into the city centre from the north. Here, under reconstruction of the roadway to save maintenance costs, traffic lanes were slightly narrowed and new cycle lanes and bus bays were provided, along with the imposition of an on-street parking ban. The only cost additional to the maintenance project was that of the bus bays.

### Priority 2. Expand our knowledge and skill base to address walking and cycling

### Why?

Achieving our goals for walking and cycling requires knowledgeable policy makers and a skilled workforce.

The transport sector — and other sectors, such as urban planning and design — can benefit from increased opportunities to learn about the needs of pedestrians and cyclists, best practice provision for walking and cycling, and how to effectively promote the use of these modes of transport.

Research is an important tool for expanding our knowledge base. There is a growing body of international research on walking and cycling, such as studies of the motivating factors and barriers around the choice — or non-choice — of walking and cycling for day-to-day transport. But there is also a need to undertake research specific to New Zealand. This research is likely to be funded from a variety of sources and to be undertaken from a variety of perspectives.

By some international standards, New Zealand specific 'tools' related to walking and cycling (such as technical standards, guidance documents and auditing tools) have been limited in nature. Work has begun to remedy this, beginning with the updating and expansion of technical standards and planning guidelines for walking and cycling facilities. There is a need for such documents to be consulted not only when specific facilities are commissioned for these modes of transport, but also as part of the design process for general roading projects or network planning.

Many walking and cycling initiatives are being developed in regions and communities around New Zealand — often in relative isolation. Increased opportunities to share experience from around New Zealand and to ensure that communities can also take advantage of international experience and innovation will enable communities to learn from the successes — and mistakes — of others.

### **Desired outcome**

A high level of understanding and expertise related to walking and cycling and an innovative, evidence-supported approach will underpin efforts for walking and cycling.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Walking and cycling are integrated into the training and on-going professional development of transport and road safety professionals, and of urban planners and designers.
- A comprehensive set of technical standards, guidelines and tools is available to support those undertaking work for walking and cycling, or work that will impact on walking and cycling.
- Promising measures and approaches as well as innovative designs for cycling and walking are regularly identified, trialed and evaluated for wider use.
- An active programme of research for walking and cycling is undertaken within a co-ordinated framework, and informed by collaboratively identified priorities that are practical and relevant to the needs of users.
- Local, national and international research and best practice experience is actively promoted and exchanged, and practitioners are provided with ready access to guidance and advice to address walking and cycling.

### New planning and design guidelines for walking and cycling

A set of new national guides aims to promote effective planning and design for cycling and walking in New Zealand transport.

#### Cycle Network and Route Planning Guide

This guide, completed in 2004, aims to promote a consistent, best-practice approach to cycle network and route planning throughout New Zealand. After establishing the principles of planning for cyclists, it sets out a process for deciding what cycle provision, if any, is desirable and where it is needed. Tools to assist the process are included.

The guide is the result of an 18-month collaboration between Land Transport New Zealand (formerly the Land Transport Safety Authority) and a wide range of cycling and local government stakeholders. It provides essential guidance for cycle network designers, transport network planners and people preparing local and regional cycling strategies.

The Cycle Network and Route Planning Guide complements the facility design guidance provided in another cycling document completed in 2004: Transit New Zealand's New Zealand Supplement to the Austroads Guide to Traffic Engineering Practice — Part 14: Bicycles.

### Pedestrian Network Planning and Facilities Design Guide

This guide aims to improve the walking environment in New Zealand by promoting a best practice approach to pedestrian network planning and facility design. It outlines a process for deciding what sort of provision should be made for pedestrians and where it is needed. It also sets out best practice standards for the design of paths and road crossing facilities.

Land Transport New Zealand (formerly the Land Transport Safety Authority) began developing the *Pedestrian Network Planning and Facilities Design Guide* in 2004, assisted by a stakeholder committee drawn from local government, user groups and central government health and transport officials. Publication is expected mid-2005.

#### Guidelines for Facilities for Blind and Vision Impaired Pedestrians (RTS 14)

These guidelines provide best practice design and installation principles for pedestrian facilities that assist blind and vision-impaired people. Detailed application guidance is included for the consistent design of kerb crossings and the use of tactile paving and audible-tactile traffic signals. The advice is consistent with pedestrian provisions for mobility-impaired pedestrians.

Hard copies of the above guides and guidelines are available from Land Transport New Zealand – Safety offices for \$20. They can be viewed at: www.landtransport.govt.nz



CYCLE NETWORK AND ROUTE PLANNING GUIDE

### Local initiatives result in national interest

Two road safety initiatives from neighbouring South Island authorities have gained the attention of others working to improve safety for walking and cycling. Both initiatives aim to tackle driver behaviour.



#### Waimakariri 'Don't Burst Their Bubble' campaign

In Waimakariri, runners, walkers, cyclists and horse riders were complaining to the District Council about motorists passing them too close and too fast for comfort. Often their concerns related to rural roads with no footpaths. The local road safety co-ordinator decided to build a promotional campaign around the idea that just as motorists are protected by the bubble of their car, motorists should perceive a bubble around other road users that should not be broken.

Each advertisement, using local people, was accompanied by a short story about that person and their problems on the road. Six colour advertisements — focusing on a walker, a jogger, a cyclist and a horse rider — were made and placed prominently in the local Saturday paper. These were followed up with three billboards at strategic sites.

A survey of 25 people undertaken a month after the last advertisement found that 15 recalled the ads without prompting, two recalled them with prompting, eight had no recall of the ads, and 23 agreed that the message was clear when shown the advertisement.

All stated that they slowed down near other road users. Anecdotally, phone calls to the council, comments from council staff and councillors, and comments to people featured in the advertisements have also been very positive.

The project won the community project award at the Road Safety Co-ordinators Conference in 2003 and was runner-up in the Cycle Action Network Cycle Awards in 2004. By the end of 2004, seven South Island and two North Island councils had taken up or planned to adapt the 'bubble' concept for use locally, including Tasman District, Nelson City, Wellington City, Dunedin City, Southland Region, Ashburton District, Christchurch City, Hamilton City and Central Otago District.

### Christchurch 40 kilometre-per-hour temporary school speed zone trial

Christchurch City Council has an ongoing 'Safe Routes to School' programme to improve the safety of children as they go to school. In 2000, to support this work, the Christchurch City Council decided it wanted to trial temporary speed zones outside schools. The Council approached the Land Transport Safety Authority (now Land Transport New Zealand—Safety) to enable the project to be undertaken as a national trial.

The trial involved the use of 40 kilometre-per-hour speed limit signs operating during school commuting times, together with associated publicity. As well as reducing traffic speeds and raising motorists' awareness, a key objective was to change parents' perceptions of safety so that they would consider allowing their children to walk or cycle to school.

Monitoring of traffic speeds after the trials showed that 96% of people noticed lower speeds around the zones. This was generally borne out by the speed measurements taken. Speed reductions were greatest where a school was not readily visible from the road, and on roads with normal speed limits of 60 kilometres per hour or 70 kilometres per hour rather than 50 kilometres per hour.

A survey of motorists indicated strong acceptance of the zones, in part because motorists perceived only a minor inconvenience, especially since the 40-kilometre-per-hour speed limit was restricted to peak school commuting times.

Overall, the zones were strongly supported by parents and the broader community, with 92% of those surveyed about the trial saying they would like to see more such zones in Christchurch. More than half the parents surveyed said they would encourage more walking and cycling to school by their children with such zones in place.

The Land Transport Safety Authority deemed the trial a success and authorised nationwide application of the programme in 2002. In Christchurch, the City Council has an ongoing programme to put in place about three such zones per year. By the end of 2004, there were 12 zones in the city, benefiting 15 schools.



# Priority 3. Encourage collaboration and co-ordination of efforts for walking and cycling

### Why?

No one sector can make all the decisions or provide all the skills and expertise required to significantly increase walking and cycling. Developing walk-and-cycle-friendly communities, for example, relies on the combined decisions and expertise of traffic engineers, transport policy makers, local government decision makers, urban planners and designers, and developers. A collaborative and co-ordinated approach is most likely to succeed.

Collaboration will also help to ensure that decisions and solutions work from a variety of perspectives. This is particularly important where solutions seen as useful by one sector may raise concerns for others. For example, transport professionals may support the use of short walkways between streets in order to reduce travel time for pedestrians, while crime reduction experts may advocate against these due to personal security concerns.

Walking and cycling tend to be two among many interests for most organisations and this may limit the level of resourcing that organisations are able to direct toward walking and cycling. Collaboration can ensure that available resources are used to the best effect. For example, a partnership to promote walking and cycling could combine resources from the health, environment, and energy efficiency sectors, as well as from the transport sector.

An important perspective on walking and cycling is offered by the organisations or networks that represent pedestrians and cyclists. Such groups are increasingly being called on to represent their constituents in a wide variety of consultative, advisory and decision-making forums — often with little or no recompense. Most such groups rely largely on voluntary efforts, and some are concerned about their capacity to respond to growing numbers of requests in an effective and informed fashion.

### **Desired outcome**

A co-ordinated, inter-sectoral and collaborative approach will enhance the effectiveness of efforts for walking and cycling and maximise the use of available resources.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Inter-sectoral groups co-ordinate, advise on and monitor implementation of walking and cycling strategies.
- Inter-agency partnerships regularly develop, fund and implement programmes and initiatives for walking and cycling.
- Planners, designers, traffic engineers, developers and those representing pedestrians and cyclists collaborate in the early stages of planning for developments and re-developments.
- Discussion and resolution of issues is encouraged between sectors and among those with varying points of view related to walking and cycling.
- Pedestrians and cyclists are represented in transport forums such as Regional Land Transport Committees and Road Safety Advisory Groups.
- Practical support is provided to walking and cycling user groups and networks to enable them to provide high-quality input into advisory, planning and decision-making processes.

# Council, agency and community collaboration a hallmark of Tawa 'Safer Roads' project

Over the next seven years, Wellington City Council expects to spend \$21 million to reduce road crashes by 33% in Wellington City, under its 'Safer Roads' programme. This programme aims to improve the safety of the road environment for all road users. Safety improvements for pedestrians and cyclists are an important part of this, because pedestrians account for 24% of the City's road casualties, and cyclists account for 14%. The suburb of Tawa was chosen as the site for the Council's first 'Safer Roads' project in 2003.

Early on, the benefits of taking a collaborative approach in Tawa were recognised. A technical committee was established, involving Council traffic engineers, Council road safety co-ordinators, and representatives of agencies such as Transit New Zealand, the Greater Wellington Regional Council, the New Zealand Police, and Land Transport New Zealand.

The Council didn't stop there. Strong emphases were also put on creating links with its 'Safe Routes to School' programme and on collaboration with the local community and with interest groups such as Cycle Aware Wellington and Living Streets Aotearoa. Two initial workshops with community stakeholders helped to identify what needed to be done. Individual meetings were held with groups representing pedestrians, cyclists, local residents, schools, colleges and bus companies.

The outcomes of the consultation were analysed and proposals were drawn up. These were the subject of a formal consultation, including a public meeting and development of a booklet summarising the proposals. This booklet was made widely available to residents, businesses and community groups. Of 142 formal submissions received, 135 were in general agreement with the proposals, with only seven submissions opposing them.

The project has included a strong engineering component to create a safer, more accessible environment for walking and cycling. As pedestrian and cyclist crashes tend to be spread across an area, rather than occurring only at 'black spots', an area-wide approach was taken. Measures implemented in the second half of 2004 included crossing points with central refuge islands, new and improved footpaths, speed humps and mini-roundabouts (including cycle bypass lanes) to slow traffic, and 'recommended cycle route' signs. The Council is also planning to use the procedure set out in the Speed Setting Rule to reduce the speed limit from 50 kilometres per hour to 40 kilometres per hour in some parts of Tawa.



Alongside the engineering measures, from 2005, education and enforcement measures are also planned. Education initiatives will include a focus on children and also on motorists — with motorist campaigns focused on speed limits and the use of roundabouts, as well on as raising their awareness of pedestrians and cyclists. Targeted road policing is also planned, and increased parking enforcement is already underway, targeting unsafe parking around schools and other problem spots.

### **FOCUS TWO**

### Providing supportive environments and systems

A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment requires communities and transport systems that enable and invite walking and cycling. Achieving this requires us to look at how we plan our cities and neighbourhoods and how we can make our existing communities more walk-and-cycle-friendly.

While most of our walking and much of our cycling occurs over relatively short distances, a transport system that supports safe long-distance cycling is also important.

# Priority 4. Encourage land use, planning, and design that supports walking and cycling

### Why?

Many of our current land use and development practices have resulted in long distances between origin and destination points, increasing our dependence on motor vehicles to meet day-to-day needs. Destinations within walking and cycling distance help give us the 'choice to choose' walking and cycling. The more destinations within easy walking and cycling distance, the easier it will be to increase use of these modes of transport.

Higher-density and mixed-use development can place origin and destination points closer together, enabling walking and cycling to be used more often in day-to-day transport. The placement of new subdivisions, housing complexes and retirement villages can either contribute to, or reduce, residents' ability to walk and cycle.

Supportive layout and design of new developments can also increase walking and cycling. This can include the placement of facilities such as schools, services, shops and recreational facilities, but it also includes the design of the street systems used to reach them. Street networks that are highly connective can be more efficient for getting around on foot or by cycle. Intimate streets are more likely to encourage cars to 'share the streets' than exaggerated corridors.

For pedestrians and cyclists, travel is not always about getting from A to B. Often, it is about experiencing life along the way — *being in* rather than just *passing through* communities. Ensuring that new communities have an active street life, interesting and human-scaled design, and amenities such as shade trees and rest benches will encourage walking and cycling.

### **Desired outcome**

Future land use, planning and urban design will result in new communities and developments that provide a wide range of destinations within walking and cycling distance and environments that invite people to walk and cycle.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- District plans and urban land use and planning policies support efforts to minimise distances between places where people live, work, shop, go to school and spend their free time, maximising their opportunities to make trips by a range of modes of transport.
- Public facilities, shopping centres and schools are sited to enable people to reach them using a range of modes of transport.
- New subdivision standards and codes encourage street design that supports walking and cycling.
- Sympathetic urban design creates environments that pedestrians and cyclists enjoy and feel comfortable in.

# The benefits of providing for walking and cycling are recognised in the Urban Design Protocol — and in Napier's West Quay

The New Zealand Urban Design Protocol, led by the Ministry for the Environment, is a voluntary commitment by central and local government, property developers and investors, design professionals, educational institutes and other groups to recognise specific urban design principles. It provides a platform to make New Zealand towns and cities more successful through quality urban design.

The New Zealand Urban Design Protocol, available from early 2005, outlines key urban design qualities to guide signatories. It defines quality urban design as, among other things, including a high priority for walking and cycling, treating streets as positive spaces, providing opportunities for social interaction, and providing environments that encourage physical activity.

The West Quay, Ahuriri, project in Napier is one of a number of best practice case studies that support the Protocol. West Key covers a former port area, which was also an important pā in pre-European times. Although the harbour still operates as a working fishing wharf, significant land use changes have increased pressure for residential and recreational activities.

The West Quay project sought to re-emphasise the place's Maori history, also incorporating its association with seaport activity, while catering for new activities in the area. About 95% of the heavy traffic has been removed from the area through traffic-calming engineering and the voluntary co-operation of trucking firms. Walking and cycling have been specifically catered for, and new apartment development close to restaurants, cafes and bars also encourages walking.



What's good for walking and cycling can also be good for business. Existing and new property owners report that commercial values have increased, the area is perceived as being a desirable area in which to invest, and their businesses have benefited. Napier Mayor Barbara Arnott comments that the 'retention of historic industries with the integration of waterfront living and recreational activities make for a dynamic environment'.

# Priority 5. Provide supportive environments for walking and cycling in existing communities

### Why?

Most of us will continue to live in existing communities and use existing transport networks to move around. It is therefore important that existing communities — and the transport networks within these — support walking and cycling.

Making existing communities more supportive can range from addressing safety at a few key sites for current users to undertaking a comprehensive review of a community's transport environment from the perspective of walking and cycling, taking into account the needs of both current and potential users.

To increase walking and cycling, it is necessary to consider enhancements that 'invite' rather than simply 'accommodate' pedestrians and cyclists. Solutions need to consider the full range of potential users — including, for walking, those with disabilities, limited mobility and other special needs.

A wide range of measures for walking and cycling can be considered in improving existing communities. Some measures are likely to focus on the physical road network (see box insert), but others could include:

- improvements to street amenities (such as shade trees or street lighting)
- provision of complimentary and end-use facilities (such as rest benches and sign-posting of pedestrian links for walkers, safe off-road facilities for new cyclists and secure cycle parking for cyclists)
- considering transport demand management policies (such as parking provision) to increase the desirability of walking, cycling and public transport in relation to private motor vehicle use
- changes to traffic management practices (such as longer pedestrian phases at traffic signals) to support improved access for pedestrians and cyclists

## Enhancing the existing road network for walking and cycling

Within an existing road network, different types of roads are likely to lend themselves to different solutions.

On quieter local streets it may be possible to calm traffic in order to slow motor-vehicle traffic speeds or to create streets that encourage cars to share road space so that streets can be safely used by a variety of users.

On busy roads, the challenge may be to ensure pedestrians can cross roads safely and conveniently and cyclists can successfully navigate intersections.

On strategic routes, including state highways that run through local communities, particular care needs to be taken to integrate these into local pedestrian and cycle networks so they do not become barriers to walking and cycling.

Where space or re-development allows, new cycle paths and walkways separate from the road network can also be considered. From a transport perspective, the ultimate benefit of such facilities is likely to rely on how well they can add value to or be integrated into the existing road network.

Where longer-distance walking and cycling routes transcend local boundaries, collaboration between local road controlling authorities is required to maximise continuous networks and route consistency.

- review of asset management plans to ensure maintenance issues associated with walking and cycling facilities are addressed
- encouraging public transport organisations to improve linkages for cycling and public transport
- encouraging key destinations (such as schools, leisure centres and workplaces) to provide appropriate end-use facilities (such as lockers, showers, and secure bike parking)
- enforcement and education measures to address other road user behaviour that impacts on cyclists and pedestrians (such as parking on cycle lanes or footpaths or travelling at high speeds)
- supporting local, regional and national initiatives to reduce vehicle emissions.

A key opportunity for walking and cycling is provided by recent requirements on councils to develop Long Term Council Community Plans.

As interest from communities grows, a challenge nationally and for road controlling authorities will be to find ways of prioritising efforts to provide walk-and-cycle-friendly environments.

### **Desired outcome**

Over time, increasing numbers of existing New Zealand communities will provide environments that support and encourage walking and cycling.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Best-practice technical standards, service guidelines and auditing tools for cycling and walking are used to guide planning and design of community walking and cycling networks and facilities, informed by early consultation with users.
- Local walking and cycling strategies identify a systematic programme to improve walking and cycling conditions in priority communities.
- Pilots are undertaken to assess the potential benefits and costs of retrofitting different types of existing communities to promote increased walking and cycling (for example inner city, medium density, and traditional suburb communities).
- 'Liveable' community initiatives, neighbourhood and inner city renewal programmes, and main street re-development projects incorporate best-practice standards for walking and cycling.
- A co-ordinated and collaborative approach to walking and cycling is undertaken between Transit NZ and local road controlling authorities and between neighbouring local authorities.
- Broader council planning processes that impact on the walking and cycling environment (such as asset management plans, parks and recreation strategies, planning for city safety, lighting strategies and parking enforcement strategies) are aligned to support walking and cycling.

### Nelson investment in walking and cycling paying dividends

Nelson City has some of the highest walking and cycling rates in the country — and Nelson City Council is keen to keep it that way.

The Council places a significant focus on providing supportive environments for walking and cycling, and invests accordingly. It is not uncommon for 25% of the Council's Capital Land Transport Programme to go toward walking and cycling facilities.

To support cycling, the Council has provided:

- 18 kilometres of off-road cycle paths and 14 kilometres of on-road cycle lanes, complete with sheltered cycle network maps at regular intervals along the network
- major bridges and underpasses enabling cyclists (and pedestrians) to avoid major new arterial roads
- a quarterly Regional Cycling Forum, and a bimonthly Bicycle Advisory Group to cover more day-to-day issues
- a cycle-crash hotline to gather information on currently unreported cycle crashes and near misses.



One of the Council's most successful cycling projects has been a highly popular four kilometre Railway Reserve Cycleway in the suburb of Stoke. Broadgreen Intermediate School, which borders the Cycleway, has seen a significant increase in cycling, with 60% of its 750 students cycling to school in 2003. Houses alongside the cycleway have reaped an estimated \$20 000 valuation premium. Earlier concerns about crime have been replaced by an appreciation of the extra surveillance provided by increased walking and cycling.

A major pedestrian focus for the Council has been the City's 'Central Area', including much of its central business district. Since the early 1990s, this area has received a comprehensive upgrade. A central area ring road system was created with signalised crossings to help pedestrians cross. Significant traffic calming has also been undertaken inside the ring roads, including installation of speed tables, landscaping and tree planting to reduce traffic speeds from 40–50 kilometres per hour to 30–40 kilometres per hour. A 'Safer Routes' project, begun in 2004, is enhancing this further — gauging how pedestrians feel about the Central Area street environment, and providing the Council with information on safety and access issues. Already, this project has led to re-positioning of street light arms to avoid having matured trees block footpath lighting, and tactile pavings to aid visually impaired people at street-crossing points such as speed tables.

Both walking and cycling will benefit from a 'Safe Journeys to School' project operating in two schools, and the Council is also keeping an eye on new developments in the city, developing district plan rules that will enable it to require linkages to reduce distances for pedestrians and cyclists.

Statistics show these efforts are paying off. For example, walking to work in Nelson increased from 9.1% of all journeys to work in 1996 to 10% in 2001 (the 2001 national average was 7.1%). Nelson also maintained its high percentage of cycle-to-work trips (7.6% of all journeys to work) between 1996 and 2001, giving it the highest such figure in New Zealand (the 2001 national average was 1.8%). At the same time, safety also appears to be improving, with the number of reported road crashes involving cyclists falling between 1999 and 2003 from 33 to 20 and those involving pedestrians from 24 to 11.

### Priority 6. Improve networks for long-distance cycling

### Why?

While most walking and a high percentage of cycling is undertaken locally, we must also consider the needs of cyclists who are involved in longer-distance cycling, often outside urban areas. Longer-distance cyclists can include cycling commuters travelling between communities, those involved in cycle touring or who are training for cycling and multi-sport events, and a growing number of cycle tourists.

Although a few long-distance off-road cycle tracks have been developed in the South Island, most longer-distance cycling occurs on the open road network, including the state highway system. This raises safety issues that are reflected in road fatality statistics for cyclists — more than half of road fatalities for cyclists occur on the open road network.

There is strong interest from the cycling community in the development of regional cycling networks and in linking these to form a national network. A national network is seen as providing a highly visible project that focuses attention on cycling, as well as providing for the needs of long-distance cyclists. Development of long-distance cycling networks can involve upgrading on-road cycling facilities on key routes to improve access and safety for cyclists, as well as developing key off-road long-distance cycling facilities to provide alternatives to on-road routes.

Strong linkages with public transport carriers (such as trains and coaches) can also be important, particularly for cycle tourism.

One issue for a national cycling network in New Zealand is that, compared with places like Britain, our network may need to use more busy roads, including state highways. This could raise the costs associated with developing the network and require careful prioritisation of routes.

### **Desired outcome**

The transport network will, over time, provide increased and safer opportunities for longer-distance cycling.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- The role of long-distance cycling within the general mix of cycling activity, and within the transport mix is identified. Current and potential levels of cycle tourism, competitive and event cycling, long-distance commuting and cycle touring in New Zealand are clarified.
- The potential for a national cycling network and the costs and benefits associated with achieving this, are investigated.
- Regional and local cycling strategies reflect the full range of cycling activity that occurs in their area, including longer-distance cycling as appropriate.
- National cycling technical standards and service guidelines address open road cycling and development of long-distance off-road cycling routes.
- Linkages are strengthened between cycling and long-distance transport operators such as train, ferry, air and coach lines and their terminal operators, with the aim of encouraging bike-friendly policies, practices and facilities.
- Funding partnerships between communities and a range of sectors that stand to benefit from long-distance off-road facilities are explored.

### Otago Central Rail Trail benefits cyclists—and the local economy

The popular Otago Central Rail Trail runs 150 kilometres from Middlemarch to Clyde, over viaducts and causeways, through cuttings, tunnels and the spectacular Poolburn Gorge.

The route uses a former rail line closed to rail traffic in 1990 and acquired by the Department of Conservation (DoC) in 1993. In 2000 — six years and \$850 000 of restoration work later — the route was re-opened as a walking, cycling and (on some sections) horse-riding trail.



Now, around 100 000 people visit the Trail, or sections of it, annually. Around 5 000 people travel the full length, usually by cycle. Typically, this can take three to five days, with walkers taking around five days. With the railway's original sleepers, rails and crushed rock ballast removed (some was re-used in restoring the route), Trail users experience a good gravel road, suitable for cycling and walking, with no steep hills or sharp curves. The Taieri Gorge Railway links the Middlemarch end of the Trail with Dunedin.

The Trail provides a range of benefits — preserving heritage, promoting recreation and tourism, and helping to regenerate the economy of remote rural areas. The former Ranfurly Station, along the Trail, has been converted to a visitor information centre with displays on the railway line's history.

Accommodation, tour and transport operators, eating places and other facilities — like petrol stations and bicycle hire outlets — all benefit from Trail visitors. Many groups travel with a support vehicle to meet them at stops along the way. Unlike motorists, who can carry much more with them, cycle tourists buy more of their food and basic necessities en route.

A charitable trust co-ordinated most of the funding for the Trail's development. This involved community and benefactor grants, with government work-employment schemes also contributing. DoC donated staff time and now manages the Trail as a public recreation reserve, with responsibility for ongoing maintenance and weed spraying work.

As of 2004, the Otago Central Rail Trail was unique in New Zealand, although at least three other rail trail projects were being actively promoted elsewhere in the country. A New Zealand Rail Trails Trust has now been formed to co-ordinate the efforts of the various groups in terms of standards, processes and procedures.

### **FOCUS THREE**

### Influencing individual travel choices

Some people walk or cycle through necessity, but many others can choose between modes of transport. Encouraging more people to choose walking or cycling over other modes is central to the success of this strategy.

While creating walk-and-cycle-friendly communities and transport systems will reduce practical obstacles to walking and cycling, addressing people's perceptions of these modes and actively encouraging and supporting individuals and communities in changing their travel behaviour is also likely to be required.

# Priority 7. Encourage positive attitudes towards and perceptions of walking and cycling as modes of transport

#### Why?

People's perceptions help to determine what modes of transport they consider for day-to-day use. While there is growing awareness of the benefits of walking and cycling, not all perceptions of walking and cycling support their being selected.

For example, walking and cycling are often viewed primarily as leisure activities rather than as transport options. Alternatively, they are viewed as modes of transport for people with limited transport options (such as children or the socially disadvantaged) or as modes for 'enthusiasts' rather than for mainstream users.

Other common perceptions of walking and cycling can also be obstacles to their consideration for transport — for example, 'they take too long', 'only really fit people can cycle', or 'its too hilly/rainy/hot/cold to walk or cycle here'. While we need to be realistic about the limitations of walking and cycling, not all perceived limitations are real. For example, while cycling is generally considered a slow mode of transport, for shorter journeys on congested roads, cycling may be quicker than driving.

For some, perceptions about safety and personal security are particularly significant in their consideration of walking or cycling as transport options. For example, it is important to address the safety concerns of parents when attempting to change the travel behaviour of children, because it is often parents who make the decisions as to how their child will travel. Safety perceptions are also addressed under 'Focus four. Improving safety and security'.

Public perceptions can be reinforced by terms used within the transport sector to describe walking and cycling, and by the value people see decision makers placing on these modes. Currently, walking and cycling are often referred to as 'alternative' or 'slow' modes of transport, while those using them are described as 'transport disadvantaged' or 'vulnerable' road users. There is a need to re-position walking and cycling as normal, desirable, and mainstream modes of transport.

Although some benefits of walking and cycling are well recognised, there is room to further promote, to the public and to decision makers, the full range of benefits these modes can offer, and also to highlight the risks and consequences of their decreasing use.

### **Desired outcome**

Walking and cycling will be perceived as mainstream, beneficial and desirable modes of transport, capable of helping us meet day-to-day needs.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Walking and cycling are actively promoted as desirable, valued and 'mainstream' modes of transport.
- Positive terminology is used to describe walking and cycling as modes of transport (such as saying 'active' rather than 'alternative' or 'slow').
- The benefits of walking and cycling are widely promoted both to the public and to decision makers, along with the consequences of decreased use of these modes.
- Negative perceptions associated with walking and cycling are addressed as part of initiatives to promote these modes.
- Perceptions related to walking and cycling are monitored as part of strategies for walking and cycling.

### Auckland event challenges perceptions of cycling as a 'slow mode'



'The wider public don't care about cycling. They do care about transport.' So says the media-savvy organiser of the 2004 Auckland Commuter Challenge, Dr Leonard Bloksberg of Cycle Action Auckland. His aim for the event was that it should be 'a transport event that included cycling, rather than a cycling event that included transport'.

Commuter Challenge events have been held before in New Zealand, but rarely this big. Bloksberg deliberately aimed not only at media coverage, but to dispel misconceptions which put people off cycling in particular, that cycling is a low-status 'slow mode'.

During the Auckland event, a cyclist, a car driver and a bus passenger raced from each of four points in north, south, east and west Auckland, converging on Aotea Square. The cyclists averaged 27 minutes a trip; the car drivers, 32 minutes; and the bus passengers, 53 minutes. A win for the cycling team reflects similar results for this type of event elsewhere in New Zealand and overseas. The four car drivers were all motor racing champions, but the four cyclists were all average commuters — to counter any ideas of bias in competency, as well as to add media interest. Among the bus passengers were high-profile local figures from politics, big business and the bus industry, with the aim of building constructive alliances and raising respect among others for the cycling sector.

Included in the information supplied to the media were the costs of the different forms of transport. *The New Zealand Herald* reported these as \$1 900 per year for motoring (petrol, oil, registration, warrant of fitness, repairs, and maintenance), \$180 per year for cycling (two services, helmet, rear light, and pump), and \$124 to \$159 per month for bus use. Information on the likelihood of injury or death was also supplied, suggesting that cycling is safer than is often perceived, if compared with the actual numbers of cyclists.

Auckland's 2004 Commuter Challenge was part of National Bike Wise Week. During this Week, commuters are invited to try cycling for themselves on National Bike-to-Work Day.

Another common feature of National Bike Wise Week throughout the country is the inter-corporate 'BikeWise Business Battle', with awards going for highest numbers of staff kilometres cycled during the week. This event aims to highlight that cycling is as much for 'suits' as for those with limited transport choices.

# **Priority 8. Encourage and support individuals in changing their travel choices**

### Why?

Supportive transport systems — plus improved perceptions of walking and cycling — will increase the likelihood of individuals *considering* the use of these modes for transport. But for many of us, our ability to turn *contemplation* into *action* can also benefit from active encouragement and support.

A range of activities are currently underway in New Zealand that can encourage people to walk and cycle for transport. These include:

- activities focused specifically on encouraging or supporting transport-oriented walking and cycling — for example, National Cycle to Work Day, Walking School Bus programmes, and increased provision of signage and maps for cyclists and pedestrians
- travel behaviour change programmes, such as work- or school-based travel plans, and community travel behaviour change initiatives that seek to raise people's awareness of a range of transport choices (which could include walking and cycling) and to encourage and support the choice of sustainable modes
- programmes that aim to encourage active living for example, New Zealand's national 'Push Play' and 'Green Prescriptions' campaigns.

Such programmes are undertaken by a variety of sectors. Some are well established. Others are relatively new. There is an opportunity to build on, strengthen and expand this work within a co-ordinated framework.

Linking programmes that support and encourage people to choose walking and cycling with initiatives to improve the environment in which the walking or cycling will occur can help ensure that their choices are enjoyable and worth repeating.

Special attention needs to be given to changing travel behaviour among children — the group for whom the decrease in walking and cycling has been greatest. Children represent the future for walking and cycling. Focusing on the young can support the development of life-long walking and cycling habits.

### **Desired outcome**

A co-ordinated and effective mix of programmes and initiatives will support development of a strong walking and cycling culture, and proactively encourage and support people to choose walking and cycling more often over private car use.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Promotion of walking and cycling occurs within a national framework that seeks to incorporate and strengthen current inter-sectoral efforts and identify new opportunities to effectively promote these modes.
- Wherever possible, walking and cycling are included and effectively promoted in travel planning and travel behaviour change initiatives.
- Workplaces, schools and popular destinations are encouraged to provide appropriate 'end-use' facilities (such as lockers, cycle parking and showers) to support active transport choices.
- Priority is given to undertaking travel behaviour change initiatives in communities that offer a good range of destinations within walking and cycling distance.
- Information is made readily available to communities about destinations within easy walking or cycling distance and about walk-and-cycle-friendly routes for reaching these.
- Promotional activities for walking and cycling are linked with efforts to make communities more friendly to pedestrians and cyclists.

# Walking school buses and school travel plans encourage children out of cars in North Shore City

Travel to education makes up around 40% of morning peak trips in Auckland. In Auckland's North Shore, research has shown that 73% of primary pupils live within a kilometre of their school, yet 53% are still being driven to and from school daily.

North Shore City Council is encouraging more children to walk and cycle to school through an extensive walking school bus network and by helping schools develop customised 'travel plans'. In 2004, more than 50 walking school bus routes were operating at 25 primary schools in the city, involving 740 children. In addition, four schools had completed



customised travel plans. A further 24 schools, including two intermediates and three secondary schools, were in the process of developing travel plans, and the Council hopes to cover the city's 80 schools within three years.

To support its school travel initiatives, the Council employs a full-time TravelWise to School co-ordinator plus a part-time road safety co-ordinator to help support the City's network of voluntary walking school bus co-ordinators. In addition, a team of five part-time 'travel planners' works directly with local schools to develop customised travel plans in consultation with boards of trustees, principals, parents, students, local residents and teachers.

The school travel plan process involves taking a thorough look at transport to a particular school or cluster of schools and identifying how to make it easier and safer for pupils to walk, cycle or catch the bus to school. Actions to reduce car trips and encourage more walking and cycling could include restricting parking, promotional activities, putting in new pedestrian crossings, starting a walking school bus, developing safe cycle paths, or installing secure bike parking and lockers for children.

In partnership with the Auckland Regional Transport Authority, the Council is also piloting a travel planning software programme (based on Geographic Information Systems) that can be integrated into the school curriculum. Students can prepare and print aerial maps of their school area, analyse survey information, locate their own houses, view property and road boundaries, find out distances from their homes to school, map routes to school, and find bus stops, cycleways and footpaths using the software.

### Lyttelton map and signs point pedestrians in the right direction

Lyttelton, on the Banks Peninsula, is a small settlement and many trips within the settlement are of easy walking distance. However, it hasn't always been readily apparent how easily trips could be made by foot.

The Lyttelton Map and Signage Project was developed to highlight walking as an attractive option and to provide pedestrian-friendly information.

Using a \$14 000 grant from the Banks Peninsula District Council to augment volunteer effort, the Christchurch-based Sustainable Cities Trust, in a process led by Lyttelton resident Wendy Everingham, took the local information centre's map of the township and redesigned it around the information walkers would want and find interesting. Information added to the map included:



- routes to particular destinations, whether these routes are flat or steep, and how long they take on foot
- · locations of (often little known) walkway shortcuts and walking tracks
- · locations of bus stops, seats, viewpoints, telephones, post boxes and churches.

The map uses an innovative 'snakes and ladders' design concept that is fun and in keeping with Lyttelton's hillside environment.

The next stage of the project involved working with the Council to erect eye-catching signs to indicate walkways, along with direction signs pointing to destinations. These also provide walking time in minutes — often a more useful measure for pedestrians than distance in kilometres.

Supported by publicity, including a public launch in October 2004, the project has:

- raised the profile of walking and made the walking environment more visible to locals and tourists
- led to better maintenance of previously-neglected walkways
- brought 15–30 people together for a weekly community walk
- provided a promotional tool for the town and generated income (from sale of maps) to Project Port Lyttelton
- · enabled the local council to provide something low-cost and tangible to the community
- made walking more interesting for adults and children alike.

The success of the project has inspired other Banks Peninsula townships to ask for similar projects.

### **FOCUS FOUR**

### Improving safety and security

Safety can be defined as 'reasonable freedom from danger, personal physical risk, and risk of property damage'. Improving safety requires us to address the risks pedestrians and cyclists face from traffic and from the transport infrastructure, as well as their concerns about crime.

Taking a risk- or danger-reduction approach can enable safety outcomes to be improved while also improving safety perceptions and access for cyclists and pedestrians.

Improving safety is integral to encouraging new users, but also to addressing the needs of current users, especially those who are most vulnerable in the road environment or who are most reliant on walking and cycling for day-to-day transport.

### Priority 9. Improve road safety for pedestrians and cyclists

### Why?

Currently, nearly one in seven road fatalities in New Zealand involves a pedestrian or cyclist. Most fatalities and many serious injuries occur when a pedestrian or cyclist is involved in a crash with a motor vehicle (see box insert).

While there has been a reduction recently in the number of road fatalities and hospitalisations for pedestrians and cyclists, this is not occurring as quickly as for motor vehicle users — particularly given that the use of these modes of transport is decreasing. Nor are gains being made evenly across all groups. For example, children remain at higher risk than many other age groups.

Pedestrians who live in larger urban centres and in lower socio-economic neighbourhoods — where a lot of walking generally occurs — feature highly in injury statistics. Maori and Pacific peoples are overrepresented in these communities and also feature more highly in pedestrian injury statistics.

Addressing the safety needs of pedestrians means considering a diverse range of users. The safety issues that occur when users such as skateboarders and users of wheelchairs and mobility scooters share footpath space with those on foot must be understood and addressed.

## Pedestrians and cyclists in road crashes\*

- On average, around 55 pedestrians and 13 cyclists die annually in crashes with motor vehicles on New Zealand's public roads. Together, pedestrians and cyclists account for 14% of all road fatalities.
- Around 650 pedestrians and 220 cyclists are hospitalised annually as a result of motor vehicle-related crashes on public roads.
- On urban roads (roads with speed limits of 70 kilometres per hour or less) pedestrians and cyclists make up 35% of road fatalities.
- Crashes involving pedestrians and cyclists most often occur on relatively busy urban roads (collectors and arterials).
- \* Information provided by the (former) Land Transport Safety Authority for the 1997–2001 period.

Poorly designed and ill maintained infrastructure also poses risks for pedestrians and cyclists. For example, inadequate design or maintenance of footpaths, cycleways and main carriageways can increase their risk of falling. For child cyclists, the cycle itself can also contribute to risk if it is inappropriate for the rider. Limited information is available on non-motor-vehicle-related injuries to pedestrians and cyclists in New Zealand, and road safety strategies to address such injuries have received less focus than strategies to reduce crashes involving motor vehicles.

Priority 7 identifies the impact that safety perceptions can have on people's transport choices. To support increases in walking and cycling, it is important that people's safety perceptions of walking and cycling are improved alongside improvements in actual safety.

Achieving both these objectives is likely to be best achieved by addressing the risks or dangers cyclists and pedestrians may face as they move about their communities – that is, by improving the overall safety of the environment in which they walk or cycle rather than focusing only on reducing the actual numbers of crashes or injuries. This approach will help to improve safety perceptions and avoid achieving reductions in crashes and injuries at the expense of access and mobility — for example, a road appearing 'safe' on a crash-data base simply because pedestrians no longer dare to cross it.

### **Desired outcome**

There will be improved road safety outcomes for pedestrians and cyclists — including for those in high-risk groups and communities. The road environment will be perceived as safe for cyclists and pedestrians.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- Road safety programmes to improve pedestrian and cyclist safety incorporate an appropriate mix of engineering, enforcement and education strategies, within a risk or danger-reduction framework.
- High priority is placed on efforts to reduce safety inequities among those who already walk and cycle and those with the fewest transport choices, as well as on building safety into efforts to increase use of the modes.
- A clear picture is established of the scope and basic injury picture (who, where, when and how; circumstances of injury; and key risk factors) associated with infrastructure-related safety issues for pedestrians and cyclists.
- Cycle and pedestrian 'best-practice' guidelines are incorporated into the safety management systems and asset management plans of road controlling authorities.
- Opportunities are provided for effective pedestrian and cycle safety education, appropriate for the range of people using these modes of transport.
- Information, practical advice, instruction and encouragement is provided to motorists on the needs and rights of pedestrians and cyclists in the road environment, and how they can 'share the road' safely with these road users.
- Road safety enforcement policies and strategies effectively address pedestrian and cycle safety issues, particularly in urban areas.
- Potential impacts on pedestrians and cyclists are adequately considered during the setting and review of vehicle standards.

# Improving safety for pedestrians and cyclists a priority for *Road Safety* to 2010 strategy

The Government's *Road Safety to 2010* strategy, released in October 2003, aims to reduce road casualties to no more than 300 deaths and 4 500 hospitalisations a year by the end of 2010, achieving this through combined engineering, enforcement and education action.

One of the *Road Safety to 2010* strategy's key priority areas is improving safety for pedestrians and cyclists. Efforts in this area recognise that safety is critical to and must support and encourage walking and cycling.



As part of the *Road Safety to 2010* strategy and in response to the draft *Getting there* — *on foot, by cycle* strategy, in 2003 the Land Transport New Zealand – Safety (formerly Land Transport Safety Authority) began work on a draft Pedestrian and Cyclist Road Safety Framework. The draft Framework, which was the subject of extensive consultation with stakeholders, expands on the safety issues and approach outlined in Priority 9 of *Getting there* – *on foot, by cycle*. It also identifies an initial plan of action for improving pedestrian and cyclist safety, in particular the research required to underpin further activity. Research undertaken in 2004 focused on developing further understanding about:

- best practice safety education and promotion initiatives
- the relationship between school travel plans and improving safety
- why people may not walk or cycle, including the role of safety perceptions within their decision making.

Ongoing refinement of the Pedestrian and Cyclist Safety Framework and further development of its action plans will be incorporated into the collaborative planning processes and implementation plans of *Getting there — on foot, by cycle*.

Other *Road Safety to 2010* strategy initiatives introduced in 2003 for pedestrian and cyclist safety included the development of a 'Safe Routes' programme for communities where pedestrians and/or cyclists may be at high risk of injury, and the production of new facility and network design guidelines for walking and cycling (described on page 21).

## Cycle Safe Christchurch provides best-practice cycle training to Christchurch kids

Cycle Safe Christchurch is an intensive cycle safety education programme developed to improve safe cycle skills and encourage cycling among young people. The programme, which has been running since 1997, focuses on Year 6 primary school pupils. In the 2003/04 year it trained 3 700 pupils in 90 schools, reaching the majority of Christchurch 10–11-year-olds.



Usually spread over four consecutive mornings or afternoons, the course involves a mix of classroom, playground and on-road instruction delivered by dedicated teams of instructors. This approach is in line with best practice recommended by international research.

There are five course modules: cycle maintenance, clothing and cycle check; riding skills; road rules and simulations; on-road riding in groups; and an individual on-road test. Those who pass receive a certificate. Parental involvement is encouraged in the on-road components and in marking the practical road test. Parents are also contacted if their child is struggling with aspects of the course and are encouraged to help with practice.

The programme has received a very positive evaluation by the Injury Prevention Unit at Auckland University. This has shown that the skills are learnt and demonstrated and the parents of children that pass the test are more likely to permit them to ride to school.

The Cycle Safe team is part of the Transport and City Streets Unit of the Christchurch City Council. The team consists of a full-time co-ordinator, two senior instructors and a pool of seven part-time instructors. The team has developed its own brand and resources.

The Cycle Safe programme is free to schools and funded by the Christchurch City Council with subsidy from Land Transport New Zealand. Bikes and helmets are supplied by a local cycle business and helmet manufacturer.

# Priority 10. Address crime and personal security concerns around walking and cycling

### Why?

Concerns about crime and personal security can act as barriers to walking and cycling. As with road safety, perceptions must be addressed alongside reported crime (which may be low), because fear often deters travel. Concerns about personal security can be a particular barrier for those who feel more vulnerable to crime (including women, the elderly, and the disabled), while parents may not allow children to walk or cycle for fear of 'stranger danger'. For pedestrians, levels of concern are often highest at night and around town centres.

Less use of walking and cycling can become a vicious circle—having fewer people 'out and about' adds to people's feelings of insecurity, leading to still fewer people walking or cycling.

Both broad social and more specific factors contribute to personal security concerns in communities. For pedestrians and cyclists, addressing situational factors such as a lack of natural surveillance, inadequate or poorly maintained lighting, entrapment points, overgrown shrubbery and graffiti will improve perceptions of security in streets and public spaces.

Many crime and safety perception issues faced by people as they move about their communities will be addressed through broader strategies such as the *Crime Reduction Strategy*, and in particular its *General Violence Strategy*. This has safety in public places as one of its focuses, as does the New Zealand Police *Safer Streets Strategy*. It is important that the personal security issues of pedestrians and cyclists are considered as part of these.

For cyclists, a further important crime-related issue relates to bicycle theft. A lack of secure parking or storage for bicycles can be a significant barrier to cycle use, and efforts to create more cycle-friendly communities must address this.

### **Desired outcome**

Streets and public spaces will be perceived as secure places for people to walk and cycle.

### How?

International and local experience indicates that the following types of action will help to achieve this outcome:

- 'Crime Prevention through Environmental Design' principles are used to create safer and more useable town centres, public spaces, streets and suburbs.
- Personal security issues are considered in the development of standards, guidelines and safety audit tools for walking and cycling.
- Pedestrian and cyclist personal security issues are identified and addressed in the community infrastructure strategies (such as lighting strategies) and maintenance policies of territorial authorities.
- Personal security issues for pedestrians and cyclists are identified and addressed in broader strategies to reduce crime in communities, and considered by Safer Community Councils and Road Safety Committees.
- Crime safety audits are built into the development of community-based walking and cycling promotion initiatives, with crime risk assessments undertaken in identified high crime and safety-risk areas (such as transport centres and parks).
- Secure bike parking is provided as part of initiatives to create cycle-friendly communities.

### Wellington's Manners Mall benefits from a CPTED approach

Manners Mall — a pedestrian mall in Wellington — is a key part of the city's vibrant inner city. However, growing safety concerns meant that the public avoided the mall at times, particularly at night. As part of a recent upgrade of the Mall, the Wellington City Council decided to use a 'Crime Prevention through Environmental Design' (CPTED) approach. This aims to discourage crime and improve people's perception of safety through environmental design changes.

Four key ideas were promoted under the CPTED approach:

- the involvement of young people in the design of the Mall to create a space that is relevant for young people and to help promote a sense of ownership
- footpaths being widened and street furniture arranged to minimise 'bottlenecks' where
  potential conflict tends to arise in other words, people were given the choice to walk
  around potential trouble
- arranging seating so as to promote natural surveillance and to minimise 'territoriality' where groups of people 'take over' parts of the mall
- replacing the standard yellow sodium street lighting with brighter metal halide lights to create a more natural white light and improve visibility and people's perception of safety.



Security cameras were also installed for a twelve-month trial, but these were viewed as a back-up to providing a safer, more congenial and inviting environment, rather than as a substitute for it.

Although no formal evaluation had been undertaken by early 2005, feedback on the changes from the police and retailers has been positive.



### **CHAPTER 4. NATIONAL IMPLEMENTATION FRAMEWORK**

*Getting there* — *on foot, by cycle* (the Strategy) outlines a strategic framework to advance walking and cycling in New Zealand transport.

The Government will take a leading role in implementing the Strategy. Central government agencies must also work toward its implementation. However, the Strategy also recognises that much of the necessary action for walking and cycling will happen regionally and locally.

The following national implementation framework will be put into place to deliver *Getting there* — *on foot, by cycle.* 

### National leadership and co-ordination

A centrally co-ordinated process will be used to implement the Strategy at a national level. This will be proactively led and supported by the Ministry of Transport.

National groups and agencies from a variety of sectors such as transport, health, leisure, and the environment are expected to play an active role in implementing aspects of *Getting there* — *on foot, by cycle*. In recognition of this, a collaborative approach to planning will be emphasised, in order to:

- enable co-ordinated action ensuring that expertise can be shared, potential synergies can be built upon and duplication of efforts can be minimised
- develop common understandings and consistent approaches to issues and practice for walking and cycling.

### Support from the National Pedestrian and Cycling Advisory Groups

The National Pedestrian and Cycling Advisory Groups currently convened by Land Transport New Zealand (formerly known as Transfund New Zealand) will be involved in advising on Strategy implementation. These groups comprise representatives of pedestrian and cycling user groups, central government agencies, and broader stakeholder organisations (such as local and regional government). The advisory groups bring together a wealth of perspectives and expertise, and enable discussion and debate of issues related to cycling and walking as well as information sharing.

### National implementation plans

National planning processes to deliver *Getting there — on foot, by cycle* will include:

- strategic planning, undertaken every 3–5 years to support forward planning of appropriate activity under the Strategy's four focus areas, and across its 10 priorities for action
- development of annual action plans that identify the specific contributions and work programmes of national groups and agencies to the Strategy's delivery.

### Emphasis on supporting effective local action

Effective action at a local level will be critical to the success of *Getting there* — *on foot, by cycle.* 

Historically, local councils have had the major responsibility for walking and cycling provision — through activities such as providing and maintaining footpaths, calming traffic in local neighbourhoods, developing cycleways, re-developing main streets, and providing parks and public spaces.

Recently, the development of local and regional cycling and walking strategies has resulted in a number of New Zealand communities undertaking increased planning, provision and promotion for walking and cycling. This has been supported by increased central government transport investment, which has raised the level of national funding contributions available to road controlling authorities for walking and cycling planning, promotion and infrastructure projects.

An early activity to be undertaken by central government will be to prioritise specific policies and actions needed to strengthen and support effective action for walking and cycling at the local level, within the framework for action set out in *Getting there* — *on foot, by cycle.* This will build on information received from stakeholders during consultation on the draft of this Strategy, which identified a number of areas as important, including the need for proactive leadership, building workforce capacity and exploring incentives and requirements to strengthen implementation.

The key role of local government in strategy implementation will be recognised through the involvement of Local Government New Zealand in the Strategy's central co-ordination process.

### Monitoring and evaluation

Regular monitoring and evaluation will be undertaken to review implementation of Strategy action plans and to assess effectiveness of the Strategy and its activities. This will help inform further development of implementation plans.

As a first step, a series of more detailed performance indicators will be established for the Strategy. These could be of two types:

- outcome indicators related to the Strategy's overall goals (such as the levels of increase sought in walking and cycling trips undertaken for transport and the reductions sought in pedestrian and cyclist injuries)
- progress indicators related to activities or intermediate 'steps along the way' (such as the percentage of regional and local authorities with walking and cycling strategies in place and the completion of standards and guidelines for walking and cycling).

### **Resourcing the Strategy**

Many sectors have a role to play in addressing walking and cycling, both nationally and in New Zealand communities, and so funding of walking and cycling initiatives will come from a variety of sources and sectors.

For example, national transport investment needs to continue to support strategy implementation, but continued investment by local government will also be needed to ensure its success.

At a national level, the Government has already signalled its commitment to walking and cycling, by committing funding investment specifically for these modes within the National Land Transport Programme. Further Government investment has also been made in the *Road Safety to 2010* Strategy, specifically to improve pedestrian and cyclist safety.

It is expected that further central government investment in walking and cycling to support strategy implementation could come from a number of sectors such as transport, health, sport and recreation, and the environment, and that this investment will be informed by:

- · ongoing monitoring and evaluation of the Strategy and its activities
- · development of the Strategy's national implementation plans
- regional and local walking and cycling strategies.

## CHAPTER 5. FIRST ACTIONS

Initial strategy implementation actions at a national level, and a timeline for their implementation, are presented below. This builds on the activity by national agencies that is currently underway for walking and cycling.

By June 2005	Clarification of the roles, responsibilities and functions of various national organisations in implementing the Strategy Further policy work completed to identify and prioritise potential actions at central level to strengthen and support effective strategy implementation at regional and local level
By December 2005	Strategic planning completed for 2006–2008 period Initial Strategy performance indicators developed First annual national inter-agency action plan in place for July 2006 to June 2007 period
By June 2007	First review of strategy completed Second national inter-agency action plan in place for July 2007 to June 2008 period

### **APPENDIX 1.** Comparison of walking and cycling in New Zealand household travel<sup>1</sup>

CYCLING	WALKING		
What percentage of our trips are undertaken by cycling/walking?			
<ul> <li>1.8% of all trips* (111 million per annum)</li> <li>4.6% of trips for 5–24 year olds</li> <li>8.5% for 10–14 year olds</li> <li>97% of journeys involving cycling are undertaken solely by cycle; 3% involve other mode as well</li> <li>*Compares with 2.5%</li> </ul>	<ul> <li>18.7% of all trips* (1.1 billion per annum)</li> <li>25% of trips for 5–24 year olds</li> <li>27% for those aged 80-plus</li> <li>70% of journeys involving walking are undertaken solely on foot; 30% involve another mode such as public transport or car travel as well</li> <li><i>6</i> for public transport trips</li> </ul>		
Who cycles or walks?			
<ul> <li>78% male</li> <li>75% of trips are made by 'under 25s'*</li> <li>10% by 25–39 year olds</li> <li>15% by those aged 40–plus</li> <li>*'Under 25s' make u</li> </ul>	<ul> <li>55% female</li> <li>43% of trips are made by 'under 25s'*</li> <li>24% by 25–39 year olds</li> <li>33% by those aged 40-plus</li> <li><i>p</i> 38% of the population</li> </ul>		
For what purpose?			
<ul> <li>38% social or recreational*</li> <li>21% education</li> <li>21% work</li> <li>16% shopping or personal business</li> <li>*Compares with 30% for an advance of the second second</li></ul>	<ul> <li>36% social recreational*</li> <li>29% shopping or personal business</li> <li>18% work</li> <li>11% education</li> <li>household travel by all modes</li> </ul>		
For what distance?*			
<ul> <li>29% are under 1 kilometre in length</li> <li>28% are 1–2 kilometres in length</li> <li>17% are 2–3 kilometres long</li> <li>26% are over 3 kilometres long, with those aged 20–39 most likely to travel longer distances</li> </ul>	<ul> <li>51% are under 1/2 kilometre in length</li> <li>20% are 1/2 to 1 kilometre in length</li> <li>17% are 1–2 kilometres in length</li> <li>11% are over 2 kilometres long</li> <li>* Walking distances are based on an average walking speed of 12 minutes per kilometre</li> </ul>		
How has our use of cyc	ling and walking declined?		
Between 1989/90 and 1997/98			
<ul> <li>Cycling trips dropped from 3.6 to 1.8% of household travel trips</li> <li>Cycling trip numbers declined by 39%</li> <li>Trips among 5–20 year olds dropped by around 50%</li> <li>Trips among 20–24 year olds rose slightly, and trips among those 40-plus remained relatively stable</li> </ul>	<ul> <li>Walking trips dropped from 21 to 19% of house hold travel trips, with the decline largest in 'walk only' journeys<sup>2</sup></li> <li>'Walk only' journeys dropped from 36 to 26% of all school journeys</li> <li>Factoring in population growth, in 1997/98, New Zealanders undertook approximately 400 000 fewer 'walk only' journeys daily then in 1989/90</li> </ul>		

<sup>1</sup> Based on a survey of household travel undertaken in 1997/98 for the *New Zealand Travel Survey* 

(Land Transport Safety Authority, 2000). In household travel data, every 'leg' of a journey is referred to as a 'trip'. <sup>2</sup> 'Walk only' journeys refer to journeys where walking is the only form of transport used to reach a destination

(as opposed to journeys that involve walking in association with car use or public transport).